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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,144	12/14/2001	John Dunlop	31749/238689	7921

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EXAMINER	
MILLER, BRANDON J	
ART UNIT	**PAPER NUMBER**
2683	8

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/936,144	DUNLOP ET AL.	
	Examiner	Art Unit	
	Brandon J Miller	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 7-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 7-11 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fapojuwo in view of Plas.

Regarding claim 7 Fapojuwo teaches a mobile radio communications network (see col. 4, lines 46-49). Fapojuwo teaches a local exchange, or mobile switching center, connected to a plurality of cell site switches, each cell site switch being connected to a cluster of base station transceivers, wherein one base station transceiver in each cluster acts as a macro cell and the remaining base station transceivers in each cluster act as micro cells (see col. 6, lines 1-25). Fapojuwo teaches each of the local exchange, or mobile switching center, and the cell site switches incorporates a database (see col. 6, lines 59-67 and col. 7, lines 1-17). Fapojuwo teaches a connection between the local exchange, or mobile switching center, and the plurality of cell site switches (see col. 6, lines 1-19 & 25-35). Fapojuwo teaches the network forms a hierarchial system, which enables resources to be allocated between the base station transceivers as required, to maintain a desired quality of service (see col. 3, lines 51-53 and col. 8, lines 10-15). Fapojuwo does not specifically teach a connection that is in the form of a common bus to which each of the local exchange, or mobile switching center, and the plurality of cell site switches is directly connected, a connection between each cell site switch and its cluster of base

station transceivers that is in the form of a common bus to which the pertaining cell site switch and base station transceivers are directly connected, or a bus that enables localization of signaling to specific buses thereby reducing the signaling load in the local exchange, or mobile switching center and, in each cluster the specific bus providing a fast signaling path. Plas teaches a connection between each switch and its cluster of base station transceivers that is in the form of a common bus to which the pertaining switch and base station transceivers are directly connected see (col. 4, lines 1-10 and col. 8, lines 53-63). Plas teaches a bus that enables localization of signaling to specific buses thereby reducing the signaling load in the local exchange, or mobile switching center and, in each cluster the specific bus providing a fast signaling path (see col. 9, lines 55-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a connection that is in the form of a common bus to which each of the local exchange, or mobile switching center, and the plurality of cell site switches is directly connected, a connection between each cell site switch and its cluster of base station transceivers that is in the form of a common bus to which the pertaining cell site switch and base station transceivers are directly connected, or a bus that enables localization of signaling to specific buses thereby reducing the signaling load in the local exchange, or mobile switching center and, in each cluster the specific bus providing a fast signaling path because this would allow improved communication quality in telecommunication networks having macrocells and microcells within macrocells.

Regarding claim 8 Plas teaches a common bus interconnecting each switch and the respective cluster is a generic transmission medium (see col. 3, lines 65-67 and col. 4, lines 5-10).

Regarding claim 9 Plas teaches generic transmission medium that is a local area network (see col. 3, lines 65-67 and col. 4, lines 5-10).

Regarding claim 10 Fapojuwo and Plas teach a device as recited in claim 7 except for the common bus interconnecting the cell site switches and the local exchange, or mobile switching center, that is a generic transmission medium. Fapojuwo does teach a connection between the cell site switches and the local exchange, or mobile switching center (see col. 6, lines 1-19 & 25-35). Plas does teach a common bus interconnecting a switch and base stations (see col. 3, lines 65-67 and col. 4, lines 5-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a common bus interconnecting the cell site switches and the local exchange, or mobile switching center, that is a generic transmission medium because this would allow for improved control of data transmission in a mobile radio communications network.

Regarding claim 11 Plas teaches a common bus that is a distributed queue dual bus network (see col. 4, lines 1-5).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lagneborg et al. U.S Patent No. 6,529,734 discloses a bandwith supply defendant cell level.

Yamaguchi et al. U.S. Patent No. 5,548,806 a mobile communication system having a cell structure constituted by integrating macro cells and micro cells.

Svedin et al. U.S Patent No. 5,442,682 discloses a method for registering traffic data in a telecommunication system.

An U.S. Patent No. 6,226,518 a cellular radio communication system having base stations constructed in the form of a daisy chain and method of controlling data transmission using the system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

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August 5, 2004